

CLAIMS

1. A method of forming a switch controller comprising:

5 forming the switch controller to receive a first control signal and responsively generate a drive signal operable to enable a power switch and to receive a second control signal and responsively generate the drive signal operable to disable the power switch wherein the first
10 control signal and the second control signal are representative of a PWM drive signal; and

forming the switch controller to generate a control output responsively to the first control signal and the second control signal.

15 2. The method of claim 1 further including forming the switch controller to receive a third control signal and responsively change a state of the controller.

20 3. The method of claim 2 wherein forming the switch controller to receive the third control signal includes forming the switch controller to ignore the first control signal and the second control signal until receiving a transition on the third control signal.

25 4. The method of claim 1 further including receiving a third control signal from another switch controller.

30 5. The method of claim 1 wherein forming the switch controller to receive the first control signal and responsively generate the drive signal operable to enable the power switch and to receive the second control signal includes forming the switch controller to receive the first and second control signals from a PWM controller.

35

6. The method of claim 1 wherein forming the switch controller to receive the first control signal and responsively generate the drive signal operable to enable the power switch and to receive the second control signal
5 includes forming the switch controller having a first state operable to receive a first control input signal and responsively control a switch drive signal suitable to enable the power switch, having a second state operable to receive a second control input signal and responsively
10 control the switch drive signal to disable the switch, having a third state operable to receive a third control input signal and responsively enable the switch controller to change from the third state to one of the first state or the second state.

15

7. The method of claim 6 wherein forming the switch controller having the first state includes forming the switch controller having the third state operable to remain in the third state upon receiving either the first
20 control signal or the second control signal and not the third control input signal.

8. A switch controller comprising:
a first output operable for controlling a power
25 switch; and
control logic having a first state operable to receive a first control signal and responsively control the first output to enable the power switch, having a second state operable to receive a second control signal
30 and responsively control the first output to disable the power switch, having a third state operable to receive a third control signal and responsively change the third state to one of the first state or the second state.

9. The switch controller of claim 8 wherein the third control signal does not change the first state or the second state.

5 10. The switch controller of claim 8 wherein the power switch is a power transistor.

10 11. The switch controller of claim 8 wherein the first control signal is representative of a first state of a PWM signal and the second control signal is representative of a second state of the PWM signal.

15 12. The switch controller of claim 11 further including the switch controller operable to receive the first and second control signals from a PWM controller.

20 13. The switch controller of claim 8 wherein the switch controller is operable in a loop configuration with a plurality of switch controllers and wherein the switch controller receives the third control signal from another switch controller of the plurality of switch controllers.

25 14. The switch controller of claim 13 further including a first control input of the plurality of switch controllers coupled to receive the first control signal and a second control input of the plurality of switch controllers coupled to receive the second control signal.

30 15. The switch controller of claim 8 further including a control output that is responsive to the first control signal and the second control signal but not the third control signal.

16. The switch controller of claim 15 wherein having
the third state operable to receive the third control
signal and responsively change the third state to one of
the first state or the second state includes having the
5 third state operable to receive a first state of the third
control signal and responsively change the third state to
the first state, and having the third state operable to
receive a second state of the third control signal and
responsively change the third state to the second state.

10

17. A method of operating a power control system
comprising:

coupling a first switch controller to drive a first
power switch;

15

coupling a second switch controller to drive a second
power switch;

driving in parallel a first control input of the
first switch controller and a first control input of the
second switch controller with a first control signal;

20

driving in parallel a second control input of the
first switch controller and a second control input of the
second switch controller with a second control signal; and

driving a third control input of the first switch
controller with first control output of the second switch
25 controller.

30

18. The method of claim 17 further including
receiving the first control signal from a PWM section of
the power control system wherein the first control signal
is representative of a first state of a PWM signal
generated by the PWM section.

35

19. The method of claim 18 further including
receiving the second control signal from the PWM section
of the power control system wherein the second control
signal is representative of a second state of the PWM
signal.

20. The method of claim 17 further including coupling a third switch controller to drive a third power switch, driving in parallel a first control input of the third
5 switch controller and the first control input of the first and second switch controllers with the first control signal;

driving in parallel a second control input of the third switch controller and the second control input of
10 the first and second switch controller with the second control signal; and

driving a third control input of the third switch controller with a first control output of the first switch controller and driving a third control input of the second switch controller with a first control output of the third
15 switch controller.